

**Dr. Duke's Phytochemical and Ethnobotanical Databases**

**List of Plants for ALPHA-TERPINYL-ACETATE**

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Apium graveolens</i>	Leaf				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Artemisia salsoloides</i>	Shoot		500.0	-0.11592748357714744	V. Kaul, P. Weyerstahl, H. Wahlberg, H. Marschall, (1992); Volatile constituents of the essential oil and the absolute of <i>Artemisia salsoloides</i> Willd. from Ladakh, Flavour and Fragrance journal, Vol.7, 299-305.
<i>Boswellia sacra</i>	Essential Oil				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Cinnamomum camphora</i>	Leaf	0.0	72.0	-0.5937830336177261	--
<i>Citrus aurantium</i>	Leaf	20.0	229.0	-0.5009027543729487	--
<i>Citrus limon</i>	Petiole		0.1		--
<i>Citrus reticulata</i>	Fruit	1.0	5.0	-0.7106101836720669	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Elettaria cardamomum</i>	Fruit	1050.0	50000.0	1.4142077668473696	--
<i>Elettaria cardamomum</i>	Seed Essent. Oil				--
<i>Elsholtzia pilosa</i>	Shoot		44.0	-0.2631827414380382	--
<i>Eucalyptus maidenii</i>	Shoot		0.1	-0.2773592892891196	Zrira, S. S., Benjlali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
<i>Eucalyptus sideroxylon</i>	Shoot		50.0	-0.2612451722556581	Zrira, S. S., Benjlali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
<i>Eucalyptus diversicolor</i>	Shoot		1320.0	0.1488736380148053	Zrira, S. S., Benjlali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
<i>Eucalyptus citriodora</i>	Shoot		190.0	-0.21603522466678812	Zrira, S. S., Benjlali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Eucalyptus punctata</i>	Shoot		0.1	-0.2773592892891196	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. <i>Journal of Essential Oil Res.</i> 4: 259-264.
<i>Eucalyptus occidentalis</i>	Shoot		0.1	-0.2773592892891196	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. <i>Journal of Essential Oil Res.</i> 4: 259-264.
<i>Eucalyptus bosistoana</i>	Shoot		0.1	-0.2773592892891196	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. <i>Journal of Essential Oil Res.</i> 4: 259-264.
<i>Eucalyptus albens</i>	Shoot		0.1	-0.2773592892891196	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. <i>Journal of Essential Oil Res.</i> 4: 259-264.
<i>Eucalyptus maculata</i>	Shoot		0.1	-0.2773592892891196	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. <i>Journal of Essential Oil Res.</i> 4: 259-264.
<i>Eucalyptus dealbata</i>	Shoot		0.1	-0.2773592892891196	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. <i>Journal of Essential Oil Res.</i> 4: 259-264.
<i>Eucalyptus siderophloia</i>	Shoot		570.0	-0.09332250978271245	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. <i>Journal of Essential Oil Res.</i> 4: 259-264.
<i>Eucalyptus camaldulensis</i>	Shoot		0.1	-0.2773592892891196	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. <i>Journal of Essential Oil Res.</i> 4: 259-264.
<i>Eucalyptus polyanthemos</i>	Shoot		3.0	-0.2764227975176359	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. <i>Journal of Essential Oil Res.</i> 4: 259-264.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus moluccana	Shoot		570.0	-0.09332250978271245	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus blakelyi	Shoot		0.1	-0.2773592892891196	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus tereticornis	Shoot		0.1	-0.2773592892891196	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus globulus	Shoot		570.0	-0.09332250978271245	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus cladocalyx	Shoot		22.0	-0.2702871617734321	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus saligna	Shoot		27.0	-0.2686725207881153	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus botryoides	Shoot		19.0	-0.2712559463646222	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus oviformis	Shoot		0.1	-0.2773592892891196	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Eucalyptus melliodora	Shoot		0.1	-0.2773592892891196	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Eucalyptus astringens	Shoot		15.0	-0.2725476591528756	Zrira, S. S., Benjilali, B. B., Fechtal, M. M., & Richard, H. H. 1991. Essential Oils of Twenty-seven Eucalyptus Species Grown in Morocco. Journal of Essential Oil Res. 4: 259-264.
Ferula gummosa	Plant				--
Hibiscus sabdariffa	Seed				Chemical Constituents of Oriental Herbs (3 diff. books)
Hibiscus sabdariffa	Leaf				Chemical Constituents of Oriental Herbs (3 diff. books)
Hibiscus sabdariffa	Calyx				--
Hibiscus sabdariffa	Fruit				Chemical Constituents of Oriental Herbs (3 diff. books)
Hypericum perforatum	Plant	0.1	1.8	-0.6913759776083797	--
Isanthus brachiatus	Plant		1.0	-0.6938930140630715	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Juniperus communis	Fruit				--
Laurus nobilis	Leaf	540.0	4000.0	1.7299987299076585	--
Lavandula x intermedia	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Lavandula latifolia	Plant	1.0	35.0	-0.58691896473867	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Levisticum officinale	Leaf				Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
Litsea glaucescens	Shoot	130.0	185.0	-0.2176498656521049	Tucker, et al, EB46(1):21-24.1992
Myrtus communis	Plant	58.0	88.0	-0.42016529961533833	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
Nepeta racemosa	Shoot		0.0	-0.277391582108826	Baser, K.H.C., Ozek, T., Akgul, A. and Tumen, G. 1993. Composition of the Essential Oil of Nepeta racemosa Lam. J. Ess. Oil Res. 5: 215-7.
Nepeta racemosa	Shoot		310.0	-0.17728384101918526	Baser, K.H.C., Ozek, T., Akgul, A. and Tumen, G. 1993. Composition of the Essential Oil of Nepeta racemosa Lam. J. Ess. Oil Res. 5: 215-7.
Ocimum basilicum	Plant				--

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Origanum majorana</i>	Plant				Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Origanum majorana</i>	Essential Oil				--
<i>Salvia sclarea</i>	Plant	1.0	155.0	-0.2093634965349002	Flavour and Fragrance Journal, 6: 154.
<i>Satureja montana</i>	Plant				CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
<i>Syzygium aromaticum</i>	Flower	155.0	170.0		--
<i>Syzygium aromaticum</i>	Fruit	155.0	170.0	-0.7035975831753031	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Tagetes lucida</i>	Shoot		30.0	-0.2677037361969252	Bicchi, C., Fresia, M., Rubiolo, P., Monti, D., Franz, C., Goehler, I. 1997. Constituents of <i>Tagetes lucida</i> Cav. ssp. <i>lucida</i> essential oil. <i>Flavor &amp; Fragrance</i> , 12(1): 47-52.
<i>Teucrium oxylepis</i>	Shoot		0.06	-0.27737220641700217	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
<i>Teucrium asiaticum</i>	Shoot		0.1	-0.2773592892891196	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
<i>Teucrium oxylepis</i>	Shoot		0.14	-0.27734637216123714	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
<i>Teucrium salviastrum</i>	Shoot				Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
<i>Teucrium scorodonia</i>	Shoot				Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.

Plant	Part	Low PPM	High PPM	StdDev	Reference
<i>Teucrium pseudoscorodonia</i>	Shoot		0.06	-0.27737220641700217	Velasco-Negueruela, A. and Perez-Alonso, M.J. 1990. The Volatiles of Six <i>Teucrium</i> Species from the Iberian Peninsula and the Balearic Islands. <i>Phytochemistry</i> 29(4): 1165-9.
<i>Thymus mastichina</i>	Plant		310.0	0.27831231656163585	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
<i>Thymus longicaulis</i>	Shoot		13950.0	4.227456766925004	Baser, K.H.C., Ozek, T., Kirimer, N. and Tumen, G. 1993. The Occurrence of Three Chemotypes of <i>Thymus longicaulis</i> C. Presl subsp. <i>longicaulis</i> in the same Population. <i>J. Ess. Oil Res.</i> 5: 291-5.
<i>Thymus zygis</i>	Shoot		20.0	-0.2709330181675588	Jimenez, J., Navarro, M.C., Montilla, M.P., Martin, A. and Martinez, A. 1993. <i>Thymus zygis</i> Oil: Its Effects on CCl <sub>4</sub> -Induced Hepatotoxicity and Free Radical Scavenger Activity. <i>JEO5</i> : 153-8.
<i>Thymus longicaulis</i>	Shoot		13950.0	4.227456766925004	Baser, K.H.C., Ozek, T., Kirimer, N. and Tumen, G. 1993. The Occurrence of Three Chemotypes of <i>Thymus longicaulis</i> C. Presl subsp. <i>longicaulis</i> in the same Population. <i>J. Ess. Oil Res.</i> 5: 291-5.
<i>Thymus zygis</i>	Shoot	0.1	295.0	-0.18212776397513564	De Cunha, A.P. and Salguiero, L.R. 1991. The Chemical Polymorphism of <i>Thymus zygis</i> ssp. <i>sylvestris</i> from Central Portugal. <i>J. Ess. Oil Res.</i> 3: 409-12.
<i>Thymus longicaulis</i>	Shoot		0.0	-0.277391582108826	Baser, K.H.C., Ozek, T., Kirimer, N. and Tumen, G. 1993. The Occurrence of Three Chemotypes of <i>Thymus longicaulis</i> C. Presl subsp. <i>longicaulis</i> in the same Population. <i>J. Ess. Oil Res.</i> 5: 291-5.
<i>Umbellularia californica</i>	Plant	240.0	960.0	2.3234044359987225	--
<i>Vitex agnus-castus</i>	Fruit				--
<i>Vitex agnus-castus</i>	Leaf		1.8	-0.6353129419169833	Ekundayo, O., Laakso, I., Holopainen, M., Hiltunen, R., Oguntiemein, B., and Kauppinen, V. 1990. The Chemical Composition and Antimicrobial Activity of the Leaf Oil of <i>Vitex agnus-castus</i> L. <i>J. Essential Oil Research</i> , 2: 115-119.

Plant	Part	Low PPM	High PPM	StdDev	Reference
Vitex agnus-castus	Flower			--	